Nuclease

Week 11

Summarized below are the experiments conducted this week in chronological order. Click on the experiment name to view it. To go back to this summary, click **Summary** in the footer.

Summary

1 Inoculation of remaining BL21(DE3) liquid culture containing pSB1C3-T7-Nuc plasmid for IPTG induction with protein extraction

Responsible

Oscar He, Ellinor Lindholm, Oskar hman, and Oscar Frisell

Protocols used

Protein expression
Sonication

Modifications and comments to protocols

	Nuc 2.1.2 GS BL21(DE3) 3	no IPTG
Protein expression (samples):	Nuc 2.1.2 GS BL21(DE3) 3	0.5 mM IPTG
	Nuc 2.1.2 GS BL21(DE3) 3	1.0 mM IPTG

Experimental Setup

Table 1: Volumes of each liquid culture. From some, 1 ml was taken for optical density measurement at 660 nm.

Sample	Volume [ml]
Nuc 2.1.2 GS BL21(DE3) 3 - no IPTG	20
Nuc 2.1.2 GS BL21(DE3) 3 - 0.5 mM IPTG	20
Nuc 2.1.2 GS BL21(DE3) 3 - 1.0 mM IPTG	20

Discussion and Troubleshooting

The induced cell samples will be used for a Kirby-Bauer test.

2 Kirby-Bauer test of expressed Nuclease

Responsible

Oscar He, Ellinor Lindholm and Oskar Ohman

Protocols used

Kirby-Bauer test

Modifications and comments to protocols

Protein/antibiotic samples:	Chloramphenicol	20 mg/ml (positive control)
	Nuc 2.1.2 GS BL21(DE3) 3	no IPTG (negative control)
	Nuc 2.1.2 GS BL21(DE3) 3	0.5 mM IPTG
	Nuc 2.1.2 GS BL21(DE3) 3	1.0 mM IPTG
Incubation time	16 h	
Volume of TOB1 cells on McConkey plates	100 μl	

Experimental Setup

The samples were applied in duplicates on two different plates.

Results and Conclusions

The growth of the TOB1 cells were uneven and difficult to interpret.

Discussion and Troubleshooting

A new Kirby-Bauer test will be performed since the results from this one were not reliable.